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| 10/762,465      | 01/23/2004  | Hsu-Ping Tseng       | 025789-00008        | 5468             |

7590 05/31/2007  
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| EXAMINER |
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AMADIZ, RODNEY

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| ART UNIT | PAPER NUMBER |
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2629

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05/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                              |  |
|------------------------------|-------------------------------|------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/762,465 | Applicant(s)<br>TSENG ET AL. |  |
|                              | Examiner<br>Rodney Amadiz     | Art Unit<br>2629             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/22/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2 and 4-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Yanagisawa et al. (U.S. Patent 6,965,377—herein referred to as “Yanagisawa”).

As to **Claim 1**, Yanagisawa teaches a position encoded sensing device comprising: a display panel (***Fig. 9, Element 21***); and a reflective plate (***Fig. 9, Element 13—Col. 4, line 60—Col. 5, line 8***) having encoded information thereon (***Fig. 9, Element 42—Col. 4, line 60—Col. 5, line 8***), wherein the reflective plate is disposed within the display panel (***See Fig. 9—Col. 6, lines 39-48***).

As to **Claim 2**, Yanagisawa teaches a light shielding layer disposed within the display panel, wherein the reflective plate is disposed on a surface of the light shielding layer (***Col. 9, line 66—Col. 10, line 7***).

As to **Claim 4**, Yanagisawa teaches a transceiver for emitting and receiving light (***Fig. 1, Elements 4, 5 and 2***), wherein the transceiver transmits light onto the reflective plate (***Col. 8, lines 21-23***), and wherein the transceiver receives reflected light containing the encoded information from the reflective plate (***Col. 7, lines 44-46 and***

**Col. 7, line 66—Col. 8, line 3).**

As to **Claim 5**, Yanagisawa teaches the transceiver comprising a transmitter for emitting light (**Fig. 1, Elements 4 and 5 and Col. 8, lines 21-23**), a receiver for receiving or detecting reflected light (**Fig. 1, Element 2, and Col. 7, lines 44-46 and Col. 7, line 66—Col. 8, line 3**) and a filter for filtering light (**Fig. 1, Element 3, Col. 8, lines 14-20 and Col. 19, lines 57-60**).

As to **Claim 6**, Yanagisawa teaches the encoded information comprises a sensing programmable code (**Col. 10, lines 8-55**).

As to **Claim 7**, Yanagisawa teaches a method of sensing a position on a display, said method comprising the steps of: displaying information on a display panel (**Col. 6, lines 14-18**); positioning a transceiver proximately to the display panel (**Fig. 1, note element 1 relative to element 11**); transmitting light from a transceiver on to the display panel (**Col. 8, lines 21-26**); receiving reflected light reflected from at least one reflective plate disposed within the display panel, the reflected light having encoded information therewith (**Fig. 1, note light (arrows) reflected from the dot array (12) to the sensor (2) and Col. 5, lines 1-8, Col. 6, lines 18-26 and Col. 7, lines 41-43**); and processing the encoded information received with the reflected light (**Col. 5, lines 4-37**).

As to **Claim 8**, Yanagisawa teaches the step of transmitting light comprising the step of: transmitting light from the transceiver on to at least one reflective plate disposed within the display panel, the at least one reflective plate having encoded information programmed thereon (**Col. 7, line 44-46 and line 66—Col. 8, line 26 and Col. 10, line**

**64—Col. 11, line 6).**

As to **Claim 9**, Yanagisawa teaches the step of receiving comprising the step of: receiving reflected light having at least position sensing code information therewith (**Col. 7, line 44-46 and line 66—Col. 8, line 26 and Col. 10, line 64—Col. 11, line 6**).

As to **Claim 10**, Yanagisawa teaches the step of processing comprising the steps of: receiving the encoded information received with the reflected light; determining a position of the transceiver with respect to the panel display based on the received encoded information (**Col. 5, lines 4-8**).

As to **Claim 11**, Yanagisawa teaches a system for sensing a position on a display comprising: a display means for displaying information on a display panel (**Fig. 9, Element 21**); a transmitting means for transmitting light from a transceiver on to the display panel (**Fig. 1, Elements 4 and 5**); a first receiving means for receiving reflected light (**Fig. 1, Element 3**) reflected from at least one reflective plate disposed within the display panel (**Fig. 1, note light (arrows) reflected from the dot array (12)**), the reflected light having encoded information therewith (**Col. 6, lines 22-24 and Col. 7, line 66-Col. 8, line 26**); and a processing means for processing the encoded information received with the reflected light (**Fig. 1, Element 6**).

As to **Claim 12**, Yanagisawa teaches the transmitting means transmits light on to at least one reflective plate disposed within the display panel, the at least one reflective plate having encoded information programmed thereon (**Col. 7, line 44-46 and line 66—Col. 8, line 26 and Col. 10, line 64—Col. 11, line 6**).

As to **Claim 13**, Yanagisawa teaches the first receiving means receives reflected light having at least position sensing code information therewith (***Col. 7, line 44-46 and line 66—Col. 8, line 26 and Col. 10, line 64—Col. 11, line 6***)

As to **Claim 14**, Yanagisawa teaches the processing means comprising: a second receiving means for receiving the encoded information received with the reflected light (***Fig. 1, Element 2***); a determining means (***Fig. 1, Element 6***) for determining a position of the transceiver with respect to the panel display based on the received encoded information (***Col. 5, lines 4-8***).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagisawa in view of Cok (U.S. Patent 7,106,307).

As to **Claim 3**, Yanagisawa teaches he reflective plate disposed on surface of a transparent plate (***Fig. 9, Element 41***) wherein the transparent plate may have optical properties such as light-transmission coefficient and a reflection coefficient.

Yanagisawa, however, fails to teach this plate being a polarizing plate. Examiner cites Cok to teach a polarizing substrate on a display panel (Fig. 10, Element 120). At the time the invention was made, it would have been obvious to a person of ordinary skill in

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the art to form the transparent plate as taught by Yanagisawa into a polarizing plate as taught by Cok in order to reduce glare thereby overcoming the problem of ambient reflections (Cok—Col. 3, line 26-28 and Col. 4, line 11).

### ***Response to Arguments***

5. Applicant's arguments filed April 5, 2007 have been fully considered but they are not persuasive. Applicant states "Yanagisawa does not teach at least a reflective plate having encoded information thereon" (Pg. 6, last paragraph). Examiner respectfully disagrees. Yanagisawa teaches a dot array (Fig. 1, 12 and Fig. 9, 42) **formed** on the film (13) (Col. 9, lines 38-42) (*emphasis added*). Therefore, the film (13) encompasses the dot array (12), which are reflective. Figure 1, clearly shows light (note the arrows) being reflected from the LED 4 to the CCD sensor (2) by way of the dot array (12); thereby, meeting the limitation set forth in claims 1, 7 and 11. Furthermore, the Applicant agrees that the dot array is a color, preferably a bright one (Pg. 7, first paragraph). It is noted that bright colors inherently reflect light.

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

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*Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has clearly shown motivation cited by the secondary reference (Cok) to combine the references. Please refer to the Office Action dated October 6, 2006 and note the citation recited in the last sentence of Page 5.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



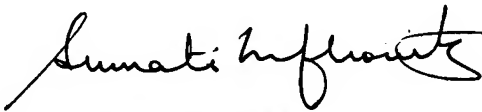
***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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